Extraterrestrial Puppets with Options

Grade: 3-4

Subject Integrated: Science, Drama

Rationale:

In this lesson, the student will create extraterrestrial sock puppets, with the option of designing a skit/play written and performed by the class.

Objectives:

Students will be able to articulate why their extraterrestrials (E.T.s) require certain body parts due to the environment the extraterrestrial is living in.

Materials:

- Socks
- Googly Eyes
- Pipe Cleaners
- Paper
- Crayons
- Safety Scissors
- Glue
- Styrofoam
- Feathers
- Pasta noodles
- Anything else that can be used for creative design

Learning Activities:

- a) Instructional Materials and Resources
 - Teacher pre-made puppet to show to class

b) Procedure

- Activity may range from one-three work periods (150 mins max + added time if designing/performing skits)
- Teacher will stand at front of room/carpet and show the class the pre-made puppet
- Teacher will ask students why they believe humans have the parts that we do. Examples:
 - Why do we have eyes that focus better on land than underwater?

- Why do we have ears? Would they look and work the same if we lived in mud, or would they need to be different?
- Why do we have tongues, and how do they help protect us from eating rotten or poisonous foods? How would we be different if we only got our energy from the sun like plants do?
- Teacher will guide students to answers and explains why humans require our hands, ears, eyes, nose, tongue [five senses] and that an E.T. would also require body parts to function in their environment
- Teacher will show the students her/his puppet and allow to take a close look at specific parts of the E.T.
- Teacher will explain why she/he put on specific parts: Ex. Antennas for sensing their surroundings, large tongue to stretch far to eat organisms from trees and ponds, squinted eyes as it is very bright on the planet.
- Students work wherever comfortable and may use materials provided or brought from home to design their own puppets
- Once their puppets are complete, students are required to write sentences about the environment their E.T. lives in and reason why each body part is necessary for the E.T. to live
- Optional: Students group up and write plays/skits with the use of their puppets
- Optional: Students orally present their E.T. to the class, explaining why their E.T. looks the way it does
- Optional: Instead of puppets, students create E.T. from clean recyclables sizes can range from six inches to two feet. Students are still required to explain why their E.T. requires the pieces the student has given them to live in the environment

c) Instructional Groups

- If needed, teacher will ask students to quiet down with the use of the lights
- Bell will be a reminder there are three minutes to start cleaning up
- Lesson will be taught to the class as a whole

d) Discussion

- What are our five senses?
- Why do we require the body parts we do?
- What are environmental reasons that would require a different sense?
- Are there any questions?

e) Assessment

- Formative assessment will be used as the teacher monitors individuals or small groups, challenging them to explain why they are creating certain features and what they indicate about the E.T.'s environment.
- Teacher will guide students to plausible answers if they are having trouble.
- Teacher will take notes on students with trouble with the skills for further assistance.
- The teacher will assess the students' based on their completion of the assignment and participation in the discussion.
- Optional: Rubrics can be made to score the writing portion of the activity summative assessment

Closure:

- a) Ending the Lesson
 - After each work period students will clean up their desks and put back their materials.
 - Each puppet will sit at the back table until finished.
 - If class creates skits, once the puppets are complete, students will begin to design scripts.
 - If class presents to class, teacher will pull name popsicle sticks to begin oral explanations of E.T.s.

b) Evaluating and Reflection of the Lesson

- Evaluation of lesson will be done by thorough formative assessment.
- Teacher will observe to make sure each student understands the objective.
- Teacher will make sure all requirements and guidelines are met by giving specific instructions to students who struggle with the skills.
- Teacher will self-critique on what worked well and what did not work well in the lesson.
- Optional: Rubrics can be used for evaluation of oral presentation, writing piece, play performance.

Standards:

- NGSS: 3-LS3-2. (strong fit) Use evidence to support the explanation that traits can be influenced by the environment.
- NGSS: 4-LS1-2. (strong fit) Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

Teacher References:

Dr. Melissa Mercer-Tachick (melissa@museconsulting.info)

- Dr. Nicolle Zellner (nzellner@albion.edu)
- http://easyscienceforkids.com/tag/extraterrestrial-life/: This website for kids describes the possibility of life on other planets.
- http://encyclopedia.kids.net.au/page/ex/Extraterrestrial_life: This is a children's encyclopedia about extraterrestrials.
- http://kinooze.com/do-aliens-exist/: This is a kid-friendly article about aliens.
- http://screencrush.com/the-10-best-kid-friendly-aliens/: This is a list of alien characters from pop culture for kids.
- http://science.nationalgeographic.com/science/space/solar-system/life-beyond-earth/: This is an article about life beyond Earth.